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² The original procedure for making changes to the Permitted List was adopted in the 1999 *DISCO II First Reconsideration Order*, 15 FCC Rcd 7207. This procedure was revised in the *First Space Station Licensing Reform Order*, to be consistent with other revisions to the satellite licensing rules that were adopted in that Order. See Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order*, 18 Docket No. 02-34, 18 FCC Rcd 10760, 10872-73 (paras. 299-302) (2003) (*First Space Station Licensing Reform Order*).

II. BACKGROUND

2. Section 11 of the Communications Act requires the Commission, in every even-numbered year beginning in 1998, to review all regulations that apply to the operations and activities of any provider of telecommunications service and to "repeal or modify any regulation it determines to be no longer necessary in the public interest."³ Accordingly, in 2006, the Commission invited interested parties to propose revisions to all of the Commission's rules, including Part 25.⁴ Among other suggestions, the Satellite Industry Association (SIA) suggested issuing ALSAT licenses for Ka-band earth stations, and creating a Permitted List procedure for non-U.S.-licensed satellites operating in the Ka-band.⁵ We agree with SIA, and so will expand ALSAT licensing to Ka-band earth stations and create a Permitted List procedure for Ka-band non-U.S. licensed satellites, as noted herein. First, we provide some background on ALSAT, the Permitted List, and the Ka-band.

A. Routine Earth Station Processing

3. The Ka-band Permitted List that we adopt in this Order is modeled on the Permitted List for conventional C-band and Ku-band earth stations that the Commission created in 1999.⁶ The Permitted List, in turn, is grounded in the Commission's rules for "routine" earth station and its two-degree spacing policy. We discuss all these concepts and their interrelation below.

4. The Commission's procedures for licensing earth stations are closely interrelated with its two-degree spacing policy for satellites operating in geostationary satellite orbit. As the satellite industry developed and expanded in the 1980s, with satellites operating in both the conventional C-band and Ku-band, the Commission instituted a two-degree orbital spacing policy to maximize the number of in-orbit satellites.⁷ Previously, satellites had been operating three to

³ 47 U.S.C. § 161.

⁴ The Commission Seeks Comment in the 2006 Biennial Review of Telecommunications Regulations, *Public Notice*, IB Docket No. 06-154, 21 FCC Rcd 6422 (2006).

⁵ See 2006 Biennial Regulatory Review, *International Bureau Staff Report*, IB Docket No. 06-154, 22 FCC Rcd 3138 (2007) (2006 *International Bureau Staff Report*). As noted above, "ALSAT" is an earth station point of communication that originally referred to "all U.S.-licensed satellites," but now refers to all U.S.-licensed satellites and all non-U.S.-licensed satellites placed on the Permitted List. We discuss "ALSAT" and the Permitted List in more detail below.

⁶ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7214-16 (paras. 16-20).

⁷ 2000 Biennial Regulatory Review -- Streamlining and Other Revisions of Part 25 of the Commission's Rules Governing the Licensing of, and Spectrum Usage by, Satellite Network Earth Stations and Space Stations, *Fifth Report and Order*, IB Docket No. 00-248, 20 FCC Rcd 5666, 5674 (para. 17) (2005) (*Part 25 Earth Station Streamlining Fifth Report and Order*); 2000 Biennial Regulatory Review -- Streamlining and Other Revisions of Part 25 of the Commission's Rules Governing the Licensing of, and Spectrum Usage by, Satellite Network Earth Stations and Space Stations, *Sixth Report and Order*, IB Docket No. 00-248, 20 FCC Rcd 5593, 5595 (para. 3) (2005) (*Part 25 Earth Station Streamlining Sixth Report and Order*). See also Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions of Part 25 of the Rules and Regulations, *Report and Order*, CC Docket No. 81-704, FCC 83-184, 54 Rad. Reg. 2d 577 (released Aug. 16, 1983); *summary printed in* Licensing Space Stations in the Domestic Fixed-Satellite Service, 48 F.R. 40233 (Sept. 6, 1983) (*Two Degree Spacing Order*). See also Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions of Part 25 of the Rules and Regulations, *Report and Order*, CC Docket No. 81-704, 99 FCC 2d 737 (1985) (*Two Degree Spacing Reconsideration*

four degrees apart. Under the two-degree orbital spacing framework, the Commission assigns adjacent in-orbit GSO satellites to orbit locations two degrees apart in longitude. At the time it adopted the two-degree framework, the Commission also established technical rules to govern earth stations communicating with these satellites to ensure that their operations do not cause unacceptable interference to adjacent satellite systems.⁸

5. We “routinely” license conventional C-band and Ku-band earth stations that meet the two-degree orbital spacing technical requirements set forth in Part 25 of the Commission’s rules.⁹ In other words, if the earth station meets certain technical requirements,¹⁰ we grant the earth station application without conducting a further technical review.¹¹

6. We often refer to U.S. earth stations with routinely-authorized technical parameters as “ALSAT” earth stations. The satellites with which an earth station is authorized to access are referred to as “points of communication.” Originally, under an ALSAT earth station license, an earth station operator providing fixed-satellite service in the conventional C- and Ku-bands could access “all U.S.-licensed space stations” as points of communication without additional Commission action, provided that those communications fall within the same technical parameters and conditions established in the earth station license.¹² Later, in 1999, the Commission expanded this designation to authorize ALSAT earth station operators to communicate with satellites on the Permitted List, as explained further below.¹³

Order).

⁸ *Part 25 Earth Station Streamlining Fifth Report and Order*, 20 FCC Rcd at 5674 (para. 17); *Part 25 Earth Station Streamlining Sixth Report and Order*, 20 FCC Rcd at 5595-96 (para. 3). Those earth station technical requirements consist primarily of minimum antenna size and maximum power level limits. For a discussion of antenna size and its effect on antenna gain, see *Part 25 Earth Station Streamlining Sixth Report and Order*, 20 FCC Rcd at 5596 (paras. 4-5).

⁹ *Part 25 Earth Station Streamlining Fifth Report and Order*, 20 FCC Rcd at 5674 (para. 17); *Part 25 Earth Station Streamlining Sixth Report and Order*, 20 FCC Rcd at 5597 (para. 6). See also 47 C.F.R. Part 25.

¹⁰ See 47 C.F.R. §§ 25.134, 25.209, 25.211, 25.212. See also *Routine Licensing of Earth Station in the 6 GHz and 14 GHz Bands Using Antennas Less than 9 Meters and 5 Meters in Diameter, respectively, for Both Full Transponder and Narrowband Transmissions, Declaratory Order*, 2 FCC Rcd 2149 (Com. Car. Bur., 1987), cited in 47 C.F.R. § 25.134.

¹¹ *Part 25 Earth Station Streamlining Fifth Report and Order*, 20 FCC Rcd at 5674 (para. 17); *Part 25 Earth Station Streamlining Sixth Report and Order*, 20 FCC Rcd at 5597 (para. 6). For purposes of this Order, we define “routine” earth stations as those that meet specified technical requirements, and which can be licensed without further review. The Commission also grants “non-routine” earth station applications, but those applications require further review to ensure that they will not cause harmful interference in a two-degree spacing environment. See 47 C.F.R. § 25.220.

¹² See *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7210-11 (para. 6).

¹³ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7214 (para. 16). See also *Intelsat North America LLC, Application for Authority to Modify Earth Station Authorization to Provide Launch and Early Orbit Phase (“LEOP”) Operations for Newly Launched Satellites, Order and Authorization*, 21 FCC Rcd 14672, 14676-77 (para. 14) (Int’l Bur., Sat. Div., 2006); *Inmarsat, Inc., Request to Streamline Licensing of L-band Mobile-Satellite Service Terminals Using Inmarsat Satellites as Points of Communication, Order*, 23 FCC

B. Ka-band

7. The Ka-band is allocated to the Fixed Satellite Service (FSS).¹⁴ In 1997, the Commission adopted rules under which it would license satellite systems in this band.¹⁵ Among other things, the Commission decided to apply a two-degree orbital spacing plan, which had worked successfully for conventional C-band and Ku-band satellites, to Ka-band Geostationary Orbit (GSO) satellites.¹⁶ Later that year, the International Bureau (Bureau) issued licenses for 13 Ka-band GSO FSS satellites.¹⁷

C. Permitted List

8. In the 1997 *DISCO II Order*, the Commission adopted a framework under which it would consider requests for non-U.S. satellite systems to serve the United States. To implement this framework, the Commission, among other things, established a procedure by which a service provider in the United States could request immediate access to a foreign in-orbit satellite that would serve the U.S. market.¹⁸

9. Later, in the 1999 *DISCO II First Reconsideration Order*, the Commission streamlined this process. Most importantly for this Declaratory Order, the *DISCO II First Reconsideration Order* created the "Permitted List." Once a non-U.S. space station is permitted to access the U.S. market pursuant to the *DISCO II* framework, we place it on the Permitted List upon the applicant's request. This list includes all satellites with which earth stations operating in the conventional C-band and Ku-band with routinely-authorized technical parameters are

Rcd 15268 (Int'l Bur., Sat. Div., 2008) (examples of development of new designation for points of communication in earth station licenses).

¹⁴ See 47 C.F.R. § 2.106.

¹⁵ See Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service, and for Fixed Satellite Service, *Third Report and Order*, CC Docket No. 92-297, 12 FCC Rcd 22310 (1997) (*Ka-band Service Rules Third Report and Order*).

¹⁶ *Ka-band Service Rules Third Report and Order*, 12 FCC Rcd at 22319-20 (paras. 21-23). See also International Bureau, Satellite Division Information: Clarification of 47 C.F.R. § 25.140(b)(2), Space Station Application Interference Analysis, *Public Notice*, 18 FCC Rcd 25099 (Int'l Bur. 2003) (*First Interference Analysis Public Notice*) (clarifying two-degree spacing analysis required for Ka-band satellite license applications).

¹⁷ See, e.g., Orion Network Systems, Inc., Application for Authority to Construct, Launch, and Operate a Ka-Band Satellite System in the Fixed-Satellite Service, *Order and Authorization*, 12 FCC Rcd 23027 (Int'l Bur., 1997).

¹⁸ Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Satellites Providing Domestic and International Service in the United States, *Report and Order*, IB Docket No. 96-111, 12 FCC Rcd 24094, 24174 (para. 186) (1997) (*DISCO II*). For a more detailed summary of the *DISCO II* framework, see *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7209-10 (paras. 4-5). See also Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Satellite Service in the United States, *Second Order on Reconsideration*, IB Docket No. 96-111, 16 FCC Rcd 19794 (2001).

permitted to communicate without seeking further regulatory approval, provided that those communications fall within the same technical parameters and conditions established in the earth station operator's original license.¹⁹ In the *DISCO II First Reconsideration Order*, the Commission also expanded the scope of ALSAT earth station licenses to permit access to any satellite on the Permitted List.²⁰

10. In the *DISCO II First Reconsideration Order*, the Commission limited the Permitted List to FSS satellites operating in the conventional C-band and Ku-band.²¹ In doing so, the Commission noted that there was an established operating environment for these systems and that, therefore, it was possible to maintain acceptable levels of interference to other systems when a licensee offering services switched from one satellite to another.²² The Commission further stated that the operating environment for other more recently established services, such as the Ka-band, was continuing to evolve. Consequently, the Commission concluded that allowing Ka-band earth station operators to switch from one satellite to another without prior Commission authorization could cause unacceptable levels of interference to other Ka-band operations.²³ In 2000, however, when redesignating and reallocating spectrum for Ka-band earth-to-space communications, the Commission adopted routine licensing parameters for Ka-band earth stations.²⁴

III. DISCUSSION

11. The Commission's rules now include standardized technical requirements for Ka-band earth stations, comparable to the "routine" technical requirements for earth stations operating in the conventional C-band and Ku-band.²⁵ These processing standards were not in place for Ka-band satellites when the Commission excluded Ka-band satellites from the Permitted List in the *DISCO II First Reconsideration Order*.²⁶ The Bureau has licensed many Ka-band

¹⁹ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7214-16 (paras. 16-20). The Permitted List is maintained on the Commission's website, and is also available via fax or e-mail. *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7215-16 (para. 19).

²⁰ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7215-16 (para. 19). The *DISCO II First Reconsideration Order* also allowed the operators of in-orbit non-U.S. satellites offering fixed-satellite service to request authority to provide space segment capacity service to licensed earth stations in the United States. Under *DISCO II*, this request could be made only by an earth station operator.

²¹ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7210-11 (para. 6).

²² *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7210 n.19.

²³ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7210 n.19.

²⁴ See Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use, *Report and Order*, IB Docket No. 98-172, 15 FCC Rcd 13430, 13474-74 (para. 90) (2000) (*18 GHz Order*); 47 C.F.R. § 25.138.

²⁵ Routine technical requirements are designed to limit the potential for routinely licensed earth stations to cause harmful interference to other licensed earth stations.

²⁶ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7210 n.19.

earth stations pursuant to the routine technical parameters that the Commission adopted in 2000. Furthermore, the Bureau has permitted several non-U.S.-licensed Ka-band satellite to communicate with U.S.-licensed earth stations.²⁷ We have not received any interference complaints with respect to these routinely authorized Ka-band operations. Consequently, permitting Ka-band earth stations that meet the Part 25 technical standards to communicate with different Ka-band satellites authorized to serve the U.S. market should not result in harmful interference to other Ka-band operations.

12. In light of this now established “routine” operating environment for Ka-band satellite operations, the Satellite Industry Association (SIA) has recommended that the Commission extend eligibility for the Permitted List to Ka-band satellites.²⁸ Accordingly, we find that it is appropriate at this time to revisit the Commission’s conclusion in the *DISCO II First Reconsideration Order*.²⁹ For the reasons discussed in this Order above, we will consider applications for new Ka-band earth station licenses that designate “ALSAT” as a point of communication.³⁰ We will also consider applications for modification of existing Ka-band earth station licenses seeking to add “ALSAT” as a point of communication.³¹ Moreover, we will add

²⁷ See *Telesat Canada, Order*, 17 FCC Rcd 25287 (Int’l Bur., 2002) (*Telesat Order*), WB Holdings 1 LLC, SES-LIC-20040504-00638 (grant stamped Sept. 21, 2004) (Earth Station in Nuevo, CA), WB Holdings 1 LLC, SES-MFS-20060424-00699 (grant stamped Oct. 10, 2006) (Earth Station in Onondaga, NY).

²⁸ See *2006 International Bureau Staff Report*, 22 FCC Rcd 3138.

²⁹ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7210 n.19.

³⁰ Ka-band ALSAT earth stations will also have the same limitations as ALSAT earth stations operating in the conventional C-band or Ku-band. In particular, nothing in the ALSAT framework eliminates the need for an earth station or space station operator to request authority to make technical changes to its facility where those changes require prior Commission approval under Sections 25.117 and 25.118 of the Commission’s rules. For example, if an ALSAT earth station needed to change the feed system of the earth station antenna to convert a linear polarization to a circular polarization in order to access another space station permitted to provide service to the United States, we would require the earth station operator to apply for a major modification to its authorization. Furthermore, if an ALSAT earth station operator has “transmit-only” authority, it would not have authority to receive transmissions from any ALSAT space station unless it obtained a modification to its authorization. Similarly, an ALSAT earth station operator with “receive-only” authority may not transmit to any ALSAT space station unless it obtained a modification to its authorization. Nothing in this Order affects these requirements in any way. See *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7213 n.31. Moreover, we note that placing a satellite on the Ka-band Permitted List does not affect the coordination requirements of any earth station communicating with that satellite. For example, pursuant to Section 25.203(k) of the Commission’s rules, 47 C.F.R. § 25.203(k), all Ka-band earth station applicants must show in their license applications that they will not cause harmful interference to any co-primary feeder link earth stations operating in all or part of the frequency bands in which they plan to operate, or certify that their operations will be consistent with the coordination agreements of the operators of the space stations at issue.

³¹ Pursuant to Section 25.203(k) of the rules, 47 C.F.R. § 25.203(k), earth station licensees seeking to extend their authorized points of communication from individual satellites to “ALSAT” must demonstrate, in the modification application, that they will not cause interference to co-primary, co-frequency feeder link operations, or must certify that their operations will be consistent with satellite coordination agreements. Further, if an “ALSAT” Ka-band license limits operations to satellites in a specified portion of the orbital arc, and the licensee seeks to communicate with satellites outside of the authorized arc, it must file a modification application requesting such authority. This is identical to the procedure used with respect to the Permitted List for the C-band, which also involves co-primary services in a shared frequency band.

non-U.S.-licensed Ka-band satellites to the Ka-band Permitted List upon request, once we authorize that satellite to provide service in the United States. The Ka-band Permitted List will serve the same function as the Permitted List for conventional C-band and Ku-band space stations.³²

13. The procedure we adopt for the Ka-band Permitted List here is similar to the one established in the *DISCO II First Reconsideration Order* for conventional C-band and Ku-band space stations. Non-U.S.-licensed Ka-band satellite operators requesting us to place their satellites on the Ka-band Permitted List must file their requests to be added to the Ka-band Permitted List in the form of a petition for declaratory ruling.³³ Those petitions must include a completed Schedule S for the non-U.S.-licensed satellite, all the other technical information required by Section 25.114 of the Commission's rules,³⁴ and sufficient information to enable the Bureau to conduct a *DISCO II* analysis where necessary.³⁵ The Commission will place petitions for declaratory ruling on public notice, provided that they are substantially complete with respect to the required information.³⁶ The procedure for amending Ka-band petitions for declaratory ruling and modifying Ka-band permitted list entries will be the same as the procedures for conventional C-band and Ku-band Permitted List amendments and modifications.³⁷ By these actions, we will expedite our licensing of Ka-band earth stations.³⁸

³² The Commission's rules currently define "Permitted List" as limited to the conventional C-Band and conventional Ku-band. See 47 C.F.R. § 25.201.

³³ This is consistent with the *Telesat Order*, 17 FCC Rcd 25287.

³⁴ 47 C.F.R. § 25.114.

³⁵ The *DISCO II* analysis considers (1) the effect on competition in the United States, (2) eligibility and operating (e.g., technical) requirements, (3) spectrum availability, (4) and national security, law enforcement, foreign policy, and trade concerns.

³⁶ See Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order*, IB Docket No. 02-34, 18 FCC Rcd 10760, 10872-73 (paras. 299-302) (2003) (*First Space Station Licensing Reform Order*) (information requirements for petitions for declaratory ruling the same as those for U.S. satellite license application). See also *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10852 (para. 244) (discussion of "substantially complete" standard for U.S. satellite license application).

³⁷ Specifically, for amendments, the petitioner will be required to submit another petition for declaratory ruling incorporating the proposed amendment with additional schedules and technical information, as appropriate. See 47 C.F.R. § 25.137(e). Operators of non-U.S.-licensed satellites on the Ka-band Permitted List can modify their U.S. operations by providing all the information required by U.S. licensees requesting modifications to their operations. See 47 C.F.R. § 25.137(f), citing 47 C.F.R. §§ 25.117(d); 25.118(e). See also *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10878-79 (paras. 319-20).

³⁸ On April 22, 2009, a group calling itself the "Ka-band Streamlining Coalition" filed a petition for rulemaking asking the Commission to start a rulemaking proceeding to consider adopting rule revisions that would have the same substantive effect as this Order that we adopt today. We dismiss that petition as moot. The members of the Ka-band Streamlining Coalition are the DIRECTV Group, Inc., ICO Global Communications, Intelsat Ltd., Loral Space and Communications, Inc., ManSat LLC, Northrop Grumman Corporation, Telesat, SES Americom, Inc., and WildBlue Communications, Inc.

14. In addition, we observe that Footnote US334 to the U.S. Table of Frequency Allocations requires non-Federal satellite and terrestrial wireless operators in the 17.8-20.2 GHz portion of the Ka-band to coordinate with Federal operators in that band.³⁹ Accordingly, we will require all Ka-band satellite operators, both U.S.-licensed and non-U.S.-licensed, seeking to provide service in the United States in the 17.8-20.2 GHz band to request that the Commission initiate coordination discussions with the National Telecommunications and Information Administration (NTIA). We will place a condition on each satellite on the Ka-band Permitted List requiring this coordination to be completed prior to provision of service in the United States, as is required by Footnote US334.

IV. ORDERING CLAUSES

15. Accordingly, IT IS ORDERED, pursuant to Section 1.2 of the Commission's rules, 47 C.F.R. § 1.2, that non-U.S. satellite operators may request access to the United States to provide fixed-satellite services in the conventional Ka-band (18.3-18.8 GHz, 19.7-20.2 GHz, 28.35-28.6 GHz, and 29.25-30.0 GHz bands) by submitting a Petition for a Declaratory Ruling, accompanied by the information required in Sections 25.114 and 25.137 of the Commission's rules, 47 C.F.R. §§ 25.114 and 25.137, for the non-U.S. satellite.

16. IT IS FURTHER ORDERED that earth stations licensed to operate with satellites in the geostationary satellite orbit in the 18.3-18.8 GHz, 19.7-20.2 GHz, 28.35-28.6 GHz, and 29.25-30.0 GHz bands may specify "ALSAT" as a point of communication in their earth station licenses.

17. IT IS FURTHER ORDERED that the Commission will make public a "Ka-band Permitted Space Station List." This list will include all U.S.-licensed Ka-band GSO satellites, and all non-U.S.-licensed GSO satellites providing fixed-satellite services in the Ka-band that have been approved to provide space segment capacity service in the United States, together with any applicable conditions or limitations on that access. Any Ka-band earth station operator with "ALSAT" specified as a point of communications in its earth station license may communicate with any satellite on the Ka-band Permitted Space Station List, including any subsequent revisions to the list, provided that its operations comply with its earth station license and any applicable conditions or limitations placed on communications with the non-U.S. satellite providing fixed-satellite services in the Ka-band.

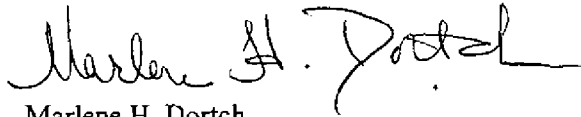
18. IT IS FURTHER ORDERED that all Ka-band satellite operators seeking to provide service in the United States in the 17.8-20.2 GHz band will be required to complete coordination under Footnote US334 to Section 2.106 of the Commission's Rules, 47 C.F.R. § 2.106, prior to provision of service, as a condition on each satellite placed on the Ka-band Permitted Space Station List.

19. IT IS FURTHER ORDERED that the petition for rulemaking filed by the Ka-band Streamlining Coalition is DISMISSED AS MOOT.

³⁹ 47 C.F.R. § 2.106.

20. IT IS FURTHER ORDERED that this Declaratory Order is effective upon release.

FEDERAL COMMUNICATIONS COMMISSION

A handwritten signature in black ink, appearing to read "Marlene H. Dortch", written in a cursive style.

Marlene H. Dortch
Secretary